

## **Cultural Resources Survey of the Prue Road and Detention Basin Project in Bexar County, Texas**

Prepared for  
**Adams Environmental, Inc.**

Prepared by  
**Laura I. Acuña**

Texas Antiquities Permit 5308

SWCA Cultural Resources Report No. 09-194

June 2009



**CULTURAL RESOURCES SURVEY OF THE PRUE ROAD AND DETENTION BASIN  
PROJECT IN BEXAR COUNTY, TEXAS**

Prepared for

**ADAMS ENVIRONMENTAL, INC.**

12018 Las Nubes  
San Antonio, Texas 78233

Prepared by

Laura I. Acuña

**SWCA ENVIRONMENTAL CONSULTANTS**

4407 Monterey Oaks Blvd.  
Building 1, Suite 110  
Austin, Texas 78749  
[www.swca.com](http://www.swca.com)

Principal Investigator

Kevin A. Miller

Texas Antiquities Permit No. 5308

SWCA Project Number 15600-026-AUS  
SWCA Cultural Resources Report No. 2009-194

June 17, 2009

## ABSTRACT

On behalf of the City of San Antonio (COSA), and in coordination with Adams Environmental, Inc., SWCA Environmental Consultants (SWCA) conducted an intensive cultural resources survey of the Prue Road and Detention Basin Project in northwestern Bexar County, Texas. The proposed bond improvement at Prue Road consists of widening the road to four lanes with a raised median and would involve the installation of an additional bridge over Leon Creek and a 3-acre detention basin west of Leon Creek. The area of potential effects (APE) begins at the intersection of Prue Road and Autumn Bluff and extends roughly 0.75 miles eastward to the intersection with Country Dawn and includes a 3-acre detention basin west of a confluence of Leon Creek and an unnamed drainage in an open field north of Prue Road. The APE is approximately 60 ft wide and 0.75 miles long along Prue Road. Construction impacts associated with road improvements, bridge addition, and the detention basin are typically 3 to 4 feet in depth. The entire APE totals eight acres. Cultural resource investigations were conducted to satisfy the requirements of the Antiquities Code of Texas (Permit No. 5309) and the San Antonio Historic Preservation Office (HPO) per the City of San Antonio Historic Preservation and Design Section of the Unified Development Code (Article 6 35-630 to 35-634). These investigations included a background and archival review and an intensive pedestrian survey with subsurface investigations.

The purpose of the work was to locate and identify all prehistoric and historic archaeological sites in the project area, establish vertical and horizontal site boundaries as appropriate with regard to the project area, and evaluate the significance and eligibility of any site recorded within the property for State Archaeological Landmark (SAL). SWCA archaeologists Laura I. Acuña, Mercedes Cody, and Josh Haefner conducted the fieldwork on June 24 and 26, 2009. The background review revealed the portion of the APE along Leon Creek was previously surveyed and site 41BX1632 is located near the western portion of the project area.

Overall, the project area is bordered by extensive residential development with various public utilities. The residential impacts within the APE include property fence lines, buried telecommunications lines, buried cable lines, sidewalks, and a hike-and-bike trail. Overhead utilities consist of a transmission line along the southern right-of-way of the APE. Impacts within the proposed detention basin area consist of a two-track road along the northern boundary and extensive, large dirt piles within the eastern portion. Thirteen shovel tests were excavated within the APE, nine within the proposed detention basin, all of which were negative. The soils consisted of shallow gravelly clay ranging from 15–50 cm. Shovel tests along Leon Creek revealed shallow gravelly silt, 5-10 cm thick, over dense gravels. A concrete slab feature encountered within the western portion of the project area was deemed modern and unrelated to site 41BX1632 located 100 m outside of the project area. The disturbances within the APE have completely eliminated the potential for encountering intact cultural resources as impacts have altered the subsurface setting and landscape. Surface and subsurface investigations determined that the detention basin area contains little to no potential of deeply buried intact cultural deposits, therefore, backhoe trenching excavations were not warranted. Accordingly, no intact significant cultural resources will be affected by any construction activities within the project area. SWCA recommends no further archaeological investigations within the project area.





## INTRODUCTION

On behalf of the City of San Antonio (COSA), and in coordination with Adams Environmental, Inc., SWCA Environmental Consultants (SWCA) conducted an intensive cultural resources survey of the Prue Road and Detention Basin Project in northwestern Bexar County, Texas (Figure 1). Cultural resource investigations were conducted to satisfy the requirements of the Antiquities Code of Texas (Permit No. 5308) and the San Antonio Historic Preservation Office (HPO) per the City of San Antonio Historic Preservation and Design Section of the Unified Development Code (Article 6 35-630 to 35-634). These investigations included a background review and an intensive pedestrian survey with subsurface investigations.

The purpose of the work was to locate and identify all prehistoric and historic archaeological sites in the area of potential effects (APE), establish vertical and horizontal site boundaries as appropriate with regard to the project area, and evaluate the significance and eligibility of any site recorded within the property for eligibility for State Archaeological Landmark (SAL). The APE is defined as the entire Prue Road and Detention Basin project area, which totals approximately 8 acres. SWCA archaeologists Laura I. Acuña, Mercedes Cody, and Josh Haefner conducted the fieldwork on June 24 and 26, 2009.

## DEFINITION OF STUDY AREA

The Prue Road and Detention Basin Project is located primarily along Prue Road in northwestern San Antonio, Bexar County, Texas. The APE begins at the intersection of Prue Road and Autumn Bluff and extends roughly 0.75 miles eastward to the intersection with Country Dawn. Prue Road crosses over Leon Creek which basically bisects this project alignment. The proposed 3-acre detention ba-

sin will be located west of a confluence of Leon Creek and an unnamed drainage in an open field north of Prue Road. The project area is situated within the lower terraces of Leon Creek just below the uplands. At the time of survey, the creek was dry revealing the bedrock creek bed.

The proposed bond improvement at Prue Road consists of widening the road to four lanes with a raised median and includes the installation of an additional bridge over Leon Creek and a 3-acre detention basin west of Leon Creek. The APE along Prue Road is 0.75 miles in length and 60 feet wide totaling 5-acres. Construction impacts associated with the widening of the road, bridge addition and the detention basin are typically 3 to 4 feet in depth. The proposed project area is located primarily within a residential area with single-family homes present predominately at the eastern and western ends of the project area. The central portion of the project area is dominated by woodlands and cleared uplands, with new construction home sites present on the southern boundary of the proposed project area. Additional disturbances within the project area include overhead and underground utilities within the APE, driveways, and a residential hike-and-bike trail along the eastern bank of Leon Creek.

The geology of the project area is exclusively mapped as Upper Cretaceous-age Austin chalk and Pleistocene-age fluvial terrace deposits along the Leon Creek drainage (Barnes 1992). The Austin chalk is recorded as chalk alternating with marl while the fluvial terrace deposits consist of gravel, sand, silty, and clay situated typically above flood level within entrenched drainages.

The soils of the project area from west to east are mapped as Eckrant cobbly clay, Lewisville silty clay (1–3 percent slopes), rarely flooded Patrick soils (1–3 percent slopes), frequently



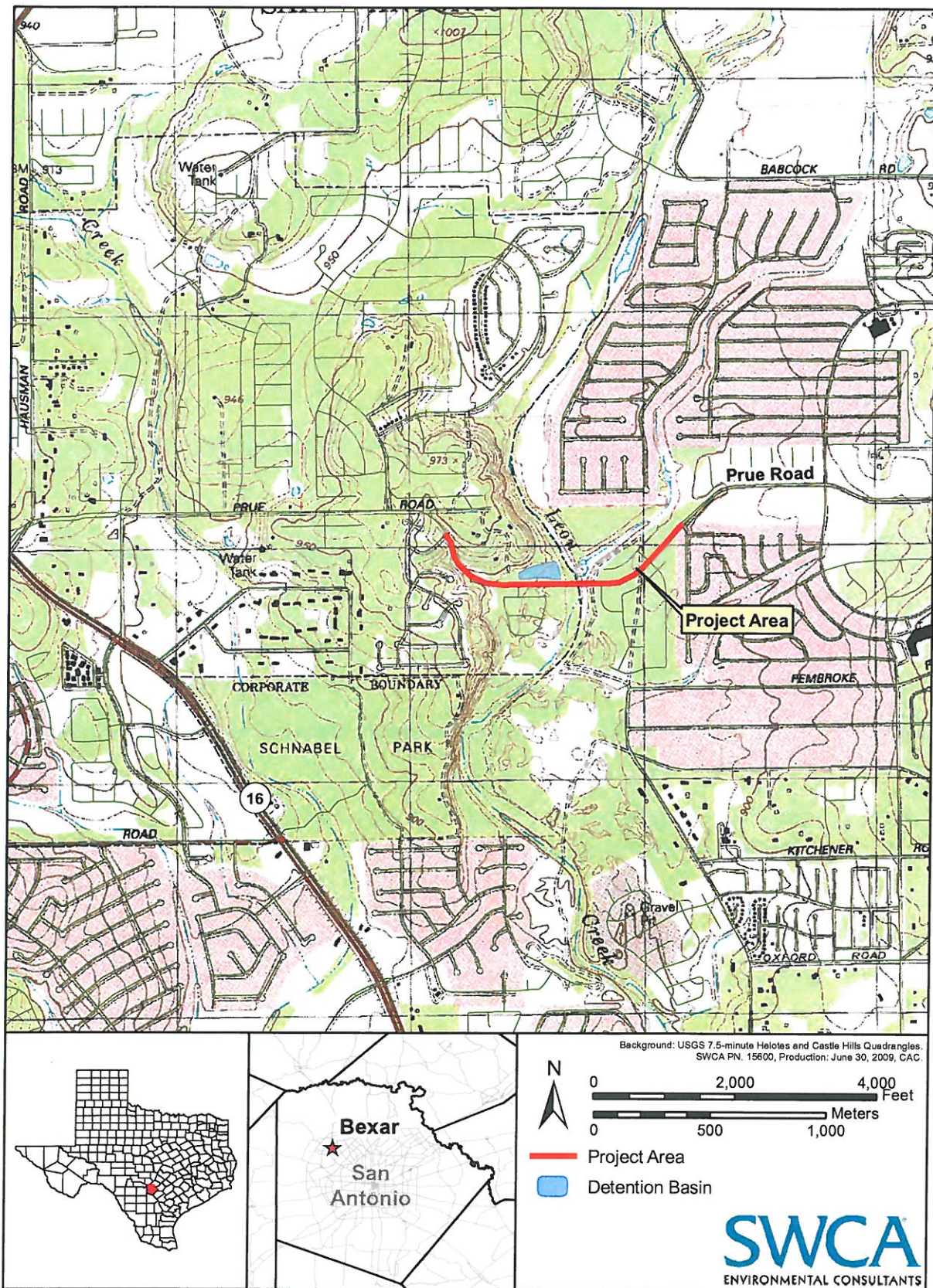


Figure 1. Project Location Map.



flooded Tinn and Frio soils along the Leon Creek drainage, and finally returning to Patrick soils (3–5 percent slopes) at the eastern terminus (WSS 2008). Within the detention basin area, approximately 70 percent of the eastern portion is mapped as Patrick soils (1–3 percent slopes) and the western portion as Lewisville silty clay. Eckrant and Patrick soils consist of shallow soils, specifically cobbly clay and gravelly clay, respectively. Lewisville silty clay soils are moderately deep and are prone to water erosion (Taylor et al. 1991). Tinn and Frio soils occur within the narrow floodplain and consist primarily of clay (WSS 2008).

## **METHODS**

### ***BACKGROUND REVIEW***

SWCA conducted a thorough background cultural resources and environmental literature search of the project area. An SWCA archaeologist reviewed the Helotes and Castle Hills, Texas, USGS 7.5-minute topographic quadrangle maps at the Texas Archeological Research Laboratory (TARL) and searched the Texas Historical Commission's (THC) Texas Archeological Sites Atlas (Atlas) online database for any previously recorded surveys and historic or prehistoric archaeological sites located in or near the project area. In addition to identifying recorded archaeological sites, the review included information on the following types of cultural resources: NRHP properties, SALs, Official Texas Historical Markers (OTHM), Registered Texas Historic Landmarks (RTHLs), cemeteries, and local neighborhood surveys. The archaeologist also examined the *Soil Survey of Bexar County, Texas* (Taylor et al. 1991) and the *Geologic Atlas of Texas, San Antonio Sheet* (Barnes 1992). Aerial photographs were reviewed to assist in identifying any disturbances.

### ***FIELD METHODS***

SWCA's investigations consisted of an intensive pedestrian survey with subsurface investigations within the project area. Archaeologists examined the ground surface and extensive erosional profiles and exposures for cultural resources. Subsurface investigations involved shovel testing in settings with the potential to contain buried cultural materials. The shovel tests were approximately 30 cm in diameter and excavated to culturally sterile deposits or impassible basal clay, whichever came first. The matrix from each shovel test was screened through ¼-inch mesh, and the location of each excavation was plotted using a hand-held GPS receiver. Each shovel test was recorded on a standardized form to document the excavations.

## **RESULTS**

### ***BACKGROUND REVIEW***

The background review determined that APE along either side of Leon Creek has been previously surveyed and one previously recorded site, 41BX1632, is located adjacent to the proposed detention basin location. In addition, two linear surveys have been conducted within one mile of the project area and eight archaeological sites are located within one mile of the project area.

The project area location along Leon Creek was previously surveyed in 1998 and 2001. In July and September of 1998, a survey was conducted along Leon Creek from Bandera Road to Babcock Road and encountered two sites, 41BX1301 and 41BX1302, within one mile of the project area. This survey was conducted by Center for Archaeological Research at the University of San Antonio (CAR-UTSA) on behalf of the San Antonio Parks and Recreation Department (SAPARD). CAR-UTSA performed another survey in this loca-

tion for SAPARD in December of 2001 for the Proposed Leon Creek Greenway Hike and Bike Trail and encountered no new archaeological sites.

Site 41BX1632 was recorded in August of 2005 by David Calame and Kay Hindes from the Southern Texas Archaeological Association (STAA). This site consists of a historic structure built in the 1840's and is located directly adjacent to the project area at 7540 Prue Road approximately 100 m north of the project area. This historic house is constructed of stone and is recorded as either a Hispanic/Tejano style or residence (not specified on site form) (Atlas). No further information is available for this site.

In addition to sites 41BX1301 and 41BX1302, six sites are within one mile of the project area: 41BX56, 41BX57, 41BX325, 41BX370, 41BX1591 and 41BX1725. Sites 41BX56 and 41BX57 were recorded in 1971 by Paul McGuff and Bill Fawcett during a Leon Creek Survey. No survey information is available for this project.

Sites 41BX325 and 41BX370 were recorded in 1976 by archaeologists from CAR-UTSA during the 201 Wastewater Project for San Antonio, Texas. Site 41BX1591 was recorded in 2004 by archaeologists from SWCA Environmental Consultants during the Woller Ranch Survey. David Calame, from STAA, recorded site 41BX1725 in April of 2007 (Atlas).

### ***FIELD SURVEY***

On June 24 and 26, 2009 two SWCA archaeologists conducted an intensive pedestrian survey of the Prue Road and Detention Basin Project. The project area is composed primarily of existing right-of-way along Prue Road with residential and commercial development present along most of its length. The distur-

bances within APE include subdivision fence lines, drive-ways, side-walks, overhead and buried utilities (Figure 2). Overhead utilities consist of a transmission line along the southern right-of-way of the APE. Buried utilities within the APE consist of waterlines, sewage lines, telecommunication cables, and television cables (Figure 3). Initially surveyed in 2001, the Leon Creek Greenway Hike and Bike Trail is located on the eastern bank of the Leon creek intersecting the APE. The proposed detention basin, located in an open field west of Leon Creek contains dirt and gravel mounds within most of the eastern portion and a two track road along its northern boundary (Figure 4).

Along Prue Road, shovel tests were limited to the northern right-of-way of the APE in the eastern portion of the project area where soils were present and shovel testing was possible (Figure 5, Table 1). The western portion consists of a steep upland terrace with exposed bedrock along the northern right-of-way. The four shovel tests along the APE encountered shallow gravelly clay loam and all were negative for cultural resources. The various disturbances related to residential development within the APE have eliminated the potential for intact cultural deposits. At the time of survey, vegetation was limited to areas between the sidewalk and road along the northern right-of-way; some areas with 100 percent ground surface visibility revealing gravelly clay loam.

Within the detention basin, vegetation consists of tall grasses and some hardwood trees (Figure 6). The nine shovel test excavations within the detention basin ranged in depth from 15–50 cmbs and all were negative for cultural resources. Three shovel tests were excavated on either side of the dirt mounds and consisted of gravelly clay loam (ST 3, see Table 1) and gravels with silt loam (ST 4-5, see Table 1). The dirt mounds encompass the entire eastern





**Figure 2. Facing east, from the western terminus of APE, overview of Prue Road with residential development and above ground utilities.**



**Figure 3. Facing east, east of Leon Creek along northern right-of-way, overview of buried utilities.**



**Figure 4. Facing west from southeast corner of detention basin area, overview of dirt piles.**



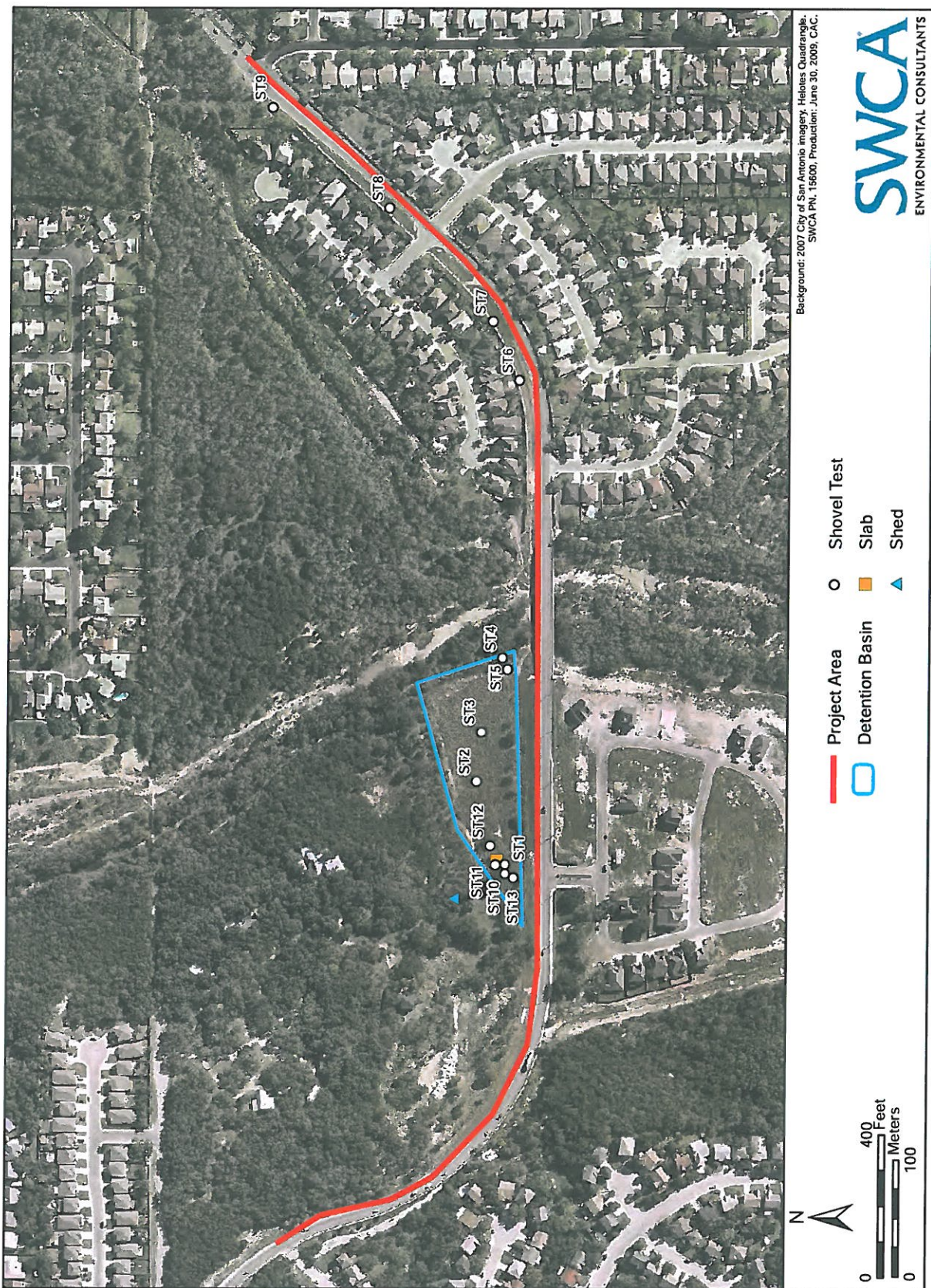


Figure 5. Overview of project area with shovel test locations.



**Table 1.** Shovel Test Data.

Shovel Test #	Level	Depth (cmbs)	P=Pos N=Neg	Munsell	Soil Color	Soil Texture Description	Inclusions	Comments
1	1	0-30	N	10 YR 4/2	Dark Grayish Brown	Silty clay loam	Compact, blocky with gravels 10%, south of slab.	Within detention basin. No cultural resources.
2	1	0-40	N	10 YR 5/3	Brown	Clay Loam	Compact, blocky w/50-70% gravels 2-4 cm in size.	Within detention basin. No cultural resources.
3	1	0-30	N	10 YR 5/3	Brown	Clay Loam	Compact, blocky w/50-100% gravels with calcium carbonate inclusions-pebbles-west of dirt pile.	Within detention basin. No cultural resources.
4	1	0-15	N	10 YR 6/2	Light Brownish Gray	Silt Loam	70% gravels from 2cm dia. to pebble size.	Within detention basin. No cultural resources.
5	1	0-15	N	10 YR 5/3	Brown	Silt Loam	40% gravels. Large cobble at base.	Within detention basin. No cultural resources.
6	1	0-3	N	10 YR 5/3	Brown	Gravels/Clay Loam	Northern ROW between Road and sidewalk. Gravels at 70%.	No cultural resources.
7	1	0-10	N	10 YR 3/2	Very Dark Grayish Brown	Clay Loam	20%GSV some tar present from road construction. Blocky and platy.	No cultural resources.
8	1	0-30	N	10 YR 4/2	Dark Grayish Brown	Clay Loam	20 % GSV, blocky.	No cultural resources.
9	1	0-3	N	10 YR 5/2	Grayish Brown	Road Gravels	In between road and buried TV cable.	No cultural resources.
10	1	0-50	N	10 YR 5/2, 10 YR 4/3	Grayish Brown, Brown	Silty Clay Loam	Small pebble inclusions-blocky w/ few rabdotus.	Within detention basin. No cultural resources.
11	1	0-40	N	10 YR 5/2, 10 YR 4/3	Grayish Brown, Brown	Silty Clay Loam	More Compact than ST 10 w/ PVC pipe frags at 0-2 cmbs. Gravels at 5-10 cmbs some smooth some rough w/ fossil shell.	Within detention basin. No cultural resources.
12	1	0-40	N	10 YR 5/2, 10 YR 4/3	Grayish Brown, Brown	Silty Clay Loam	Very compact- east of slab. Blocky soils w/ some gravels.	Within detention basin. No cultural resources.
13	1	0-40	N	10 YR 5/2, 10 YR 4/3	Grayish Brown, Brown	Silty Clay Loam	Very compact- east of slab. Blocky soils w/ some gravels. Tree root at 20-25 cmbs.	Within detention basin. No cultural resources.

# IMAGE REDACTED

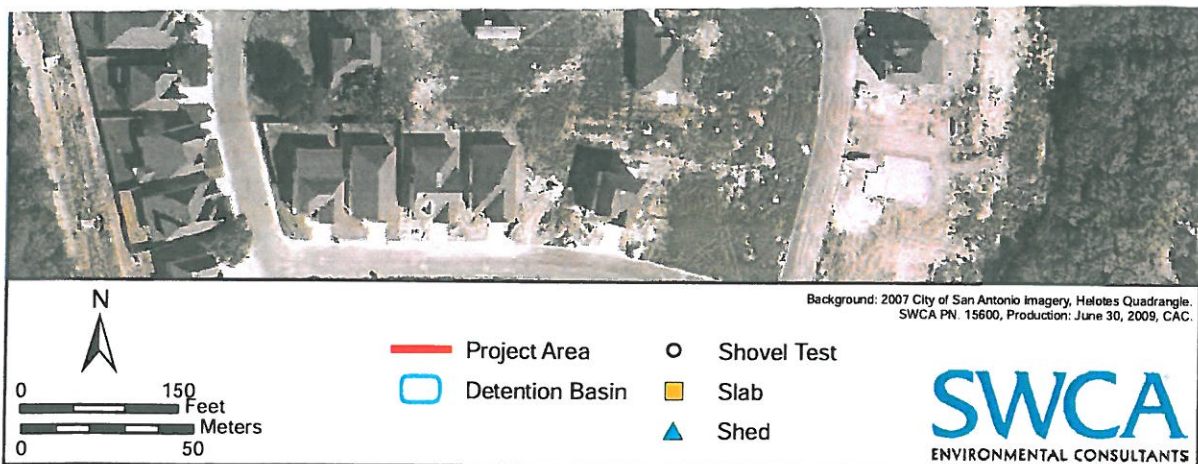


Figure 6. Detention pond with shovel test locations and 41BX1632.

portion of the detention basin area and consist of chert cobbles, limestone gravels, and fossilized shell (see Figure 4). Shovel tests determined the dirt was brought in from outside the project area.

The remaining shovel tests were excavated in the western portion of the proposed detention basin and consisted of gravelly clay loam terminating at impenetrable compact clay. Shovel tests were concentrated in this area due to a concrete slab feature observed within the project area as well as the potential for deeply buried deposits. The slab covered with debris contained PVC piping and was approximately 1.5-m-x-1.5-m in size (Figure 7). An old abandoned utility pole and garage shed located outside of the project area may be related to the feature. The garage shed is located approximately 40 m northwest of the project area with an associated cistern and old tractor (Figure 8 and Figure 9). Overall, the garage shed and concrete slab appear to be modern with no historic significance. Although site 41BX1632 is located adjacent to the project area, it is unlikely that the features detailed above are related. According to the UTM coordinates recorded on the site form, 41BX1632 is located approximately 100 m northwest of the project area on a hilltop. No additional historic features or artifacts were encountered within the detention basin area.

Although backhoe trenching was initially proposed for this area, the surface and subsurface investigations revealed no deep sediments in the APE that would necessitate such mechanical work. Shovel tests revealed compact gravelly clay loam throughout most of the detention basin area and evidence of fossil material (ST 11, see Table 1). A review of the profiles along Leon Creek determined that soils are shallow over gravels (Figure 10). Shovel tests along the western terrace of Leon Creek (ST 4 and 5, see Table 1) revealed 10 cmbs of gravelly silt over dense gravels. The terraces along

Leon Creek did not contain fine alluvial sediments that typically contain deeply buried deposits. In addition, the previously conducted surveys along Leon Creek for the SAPRD in 1998 and 2001 did not encounter any cultural resource sites. The setting and soils of the project area suggests the area is rarely flooded and prone to water erosion, minimizing alluvial deposition. Overall, the potential for deeply buried or intact buried deposits is very low.

## SUMMARY AND RECOMMENDATIONS

SWCA conducted an intensive cultural resources survey of the Prue Road and Detention Basin Project in Bexar County, Texas. Cultural resource investigations were conducted to satisfy the requirements of the the Antiquities Code of Texas (Permit No. 5308) and the San Antonio Historic Preservation Office per the City of San Antonio Historic Preservation and Design Section of the Unified Development Code (Article 6 35-630 to 35-634).

The background review revealed that the APE along Leon Creek has been previously surveyed and one previously recorded site, 41BX1632, is located adjacent to the proposed detention basin location. In addition, two linear surveys have been conducted within one mile of the project area and eight archaeological sites are located within one mile of the project area.

Overall, the project area is bordered by extensive residential development as well as various utilities. The nature of the disturbances along the length of Prue Road has reduced the potential for encountering any significant cultural resources. A total of 14 shovel tests were excavated within the APE with four shovel tests along the road where soils were observed and nine within the detention basin. All were negative for cultural materials. Shovel tests





**Figure 7. Facing west, overview of concrete slab with PVC piping and debris.**



**Figure 8. Facing west, shed located northwest of the project area.**





**Figure 9. Facing east from shed, view of old tractor.**



**Figure 10. Facing west, from creek bed of Leon Creek, western profile of creek with dirt piles in background through trees.**

along Leon Creek did not contain fine alluvial sediments that typically have the potential to contain deeply buried cultural deposits. In addition, previous investigations along Leon Creek did not encounter any cultural resource sites. Backhoe trenching initially proposed for the area was not warranted due to the results of the shovel test excavations within the detention basin and the observations of the terrace and profiles of Leon Creek.

No evidence of previously recorded site 41BX1632 was observed in the APE. According to maps, the site is located roughly 100 m from the APE. No visible evidence of the site could be seen from the APE and it appears this structure has been demolished since its documentation. The concrete feature located at the western portion of the detention basin was determined to be of modern date and no additional cultural materials were observed within the APE. Accordingly, no significant cultural resources will be affected by any construction activities within the project area. SWCA recommends no further archaeological investigations within the project area.



## REFERENCES

Barnes, V. E.

- 1992 Geologic Atlas of Texas, San Antonio Sheet. The University of Texas at Austin, Bureau of Economic Geology.

Taylor, F. B., R. B. Hailey, and D. L. Richmond

- 1991 *Soil Survey of Bexar County, Texas*. National Resources Conservation Service, United States Department of Agriculture.

Web Soil Survey (WSS)

- 2008 *Soil Survey of Bexar County, Texas*. National Cooperative Soil Survey. National Resources Conservation Service, United States Department of Agriculture. Accessed on June 27, 2008  
<<http://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>>